WHAT IS CLAIMED IS:

1. A crude oil desulfurization process comprising the following steps:
   (a) hydrodesulfurizing a crude oil feed in a crude desulfurization unit to obtain a desulfurized crude oil;
   (b) separating the desulfurized crude oil of step (a) into a light gas oil fraction, a vacuum gas oil fraction and a residual fraction;
   (c) hydrocracking the vacuum gas oil fraction of step (b) into at least one fuel product having a low sulfur content; and
   (d) hydrotreating the light gas oil fraction of step (b).

2. The process according to Claim 1 wherein the step (c) of hydrocracking the vacuum gas oil fraction further comprises:
   (a) passing the vacuum gas oil in combination with hydrogen to a first hydrocracking reaction zone to create an effluent comprising at least one fuel product having a low sulfur content;
   (b) passing at least a portion of the effluent of step (a) to a second hydrocracking reaction zone; and
   (c) recycling at least a portion of the second hydrocracking reaction zone effluent to the second hydrocracking reaction zone.

3. The process according to Claim 2 wherein the second hydrocracking reaction zone comprises a multiplicity of layered catalyst beds, including at least one hydrotreating catalyst layer which is maintained at reaction conditions preselected for high hydrotreating activity.

4. The process according to Claim 3 wherein the second hydrocracking reaction zone further comprises at least one hydrocracking catalyst layer which is maintained at hydrocracking reaction conditions, such that the entire effluent from the catalyst layer maintained at hydrocracking reaction conditions passes to the catalyst layer maintained at hydrotreating reaction conditions.

5. The process according to Claim 4, which further comprises fractionating at least a portion of the effluent from the second hydrocracking reaction zone and isolating at least one fuel product and a recycle stream which is recycled to the second hydrocracking reaction zone.

6. The process according to Claim 3 wherein the step (1) (d) of hydrotreating the light gas oil fraction further comprises passing the light gas oil fraction to the hydrotreating catalyst layer.

7. The process according to Claim 1, wherein step (1) (c) further comprises isolating at least a diesel having a low sulfur content, a kerosene having a low sulfur content, and a naphtha having a low sulfur content.

8. The process according to Claim 2 further comprising:
   (a) hydrocracking the vacuum gas oil to form a first hydrocracking zone effluent;
   (b) passing the first hydrocracking zone effluent to a hot hydrogen stripper and isolating a hydrogen-rich gaseous stream and an effluent having a low sulfur content; and
   (c) passing the hydrogen-rich gaseous stream of step (b) to the crude desulfurization unit for hydrodesulfurizing the crude oil feed.

9. The process according to Claim 3 further comprising:
   (a) hydrocracking the vacuum gas oil to form a hydrocracking zone effluent;
   (b) passing the hydrocracking zone effluent of step (a) to a hot hydrogen stripper and isolating a hydrogen-rich gaseous stream and an effluent having a low sulfur content; and
   (c) passing the hydrogen-rich gaseous stream of step (b) to the crude desulfurization unit for hydrodesulfurizing the crude oil feed.

10. The process according to Claim 9, which further comprises:

(a) passing the low sulfur effluent of step 9(b) in combination with hydrogen to a second hydrocracking zone to produce a hydrocracked liquid product; and

(b) fractionating the hydrocracked liquid product of step (a) to form at least one fuel product having a low sulfur content.

11. The process according to Claim 10, further comprising passing the low sulfur effluent of step 9 (b) to the hydrotreating catalyst layer of Claim 6.

12. The process according to Claim 1 wherein step (1) (b) of separating the desulfurized crude oil further comprises:

(a) separating the desulfurized crude oil in an atmospheric distillation column and isolating at least a light gas oil and an atmospheric residuum therefrom;

(b) separating the atmospheric residuum of step (a) in a vacuum distillation column and isolating at least a vacuum residuum stream and a vacuum gas oil stream.

13. The process according to Claim 8 wherein the first hydrocracking zone effluent of step (8) (a) is passed to a second hydrocracking reaction zone without substantially cooling the first hydrocracking zone effluent.

14. A crude oil desulfurization process comprising:

(a) hydrodesulfurizing a crude oil feed in a crude desulfurization unit to obtain a desulfurized crude oil;

(b) separating the desulfurized crude oil of step (a) and isolating a light gas oil fraction, a vacuum gas oil fraction and a residual fraction;

(c) passing the vacuum gas oil fraction of step (b) in combination with hydrogen to a first hydrocracking reaction zone, where it is hydrocracked to produce a first hydrocracking zone effluent;

(d) passing at least a portion of the first hydrocracking zone effluent of step (c) to a second hydrocracking reaction zone comprising a multiplicity of catalyst beds, including at least one hydrotreating

catalyst layer which contains catalyst preselected for high hydrotreating activity;

(e) passing the light gas oil fraction of step (b) to the hydrotreating catalyst layer of step (d) for hydrotreating the light gas oil fraction; and

(f) recycling at least a portion of the combined effluent of steps (d) and (e) to the second hydrocracking reaction zone.